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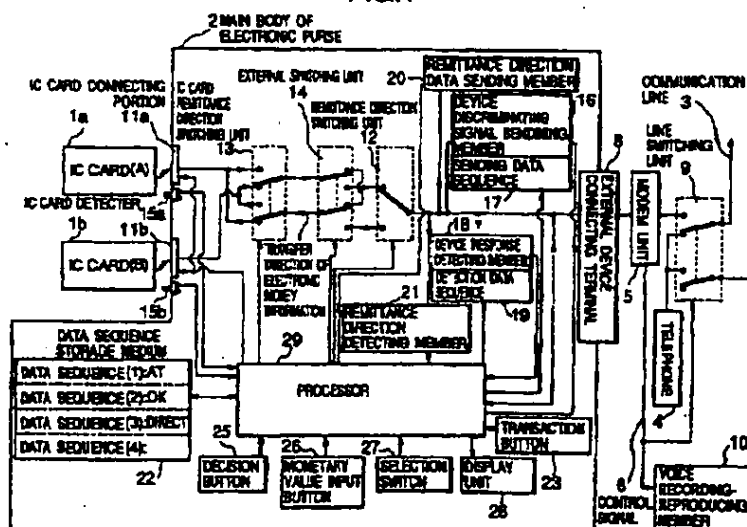
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(54) Electronic purse

(57) A processor 29 automatically sets a direction of transferring electronic money information depending on the existence of IC cards 1a, 1b connected to IC card

connecting portions 11a, 11b, and the existence of an external device connected to an external device connecting terminal 8, thus making instructing operations for transferring electronic money information easier.

FIG.1



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EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.8)
X	EP 0 670 556 A (GEMPLUS CARD INT) 6 September 1995 (1995-09-06) * column 1, line 1 - column 1, line 5 * * column 1, line 58 - column 2, line 44 * * column 3, line 14 - column 6, line 2 * * column 6, line 42 - column 6, line 58 *	1	G07F7/08 G06F17/60 G07F19/00
A	—	5	
X	WO 92 21110 A (TELEVERKET) 26 November 1992 (1992-11-26) * the whole document *	1	
A	US 5 434 395 A (STORCK JEAN R ET AL) 18 July 1995 (1995-07-18) * column 8, line 55 - column 9, line 13 * * column 9, line 57 - column 12, line 34 * * column 14, line 4 - column 14, line 24 * * column 17, line 12 - column 18, line 52 *	1-4,6-8	
A	GB 2 282 683 A (GEN INFORMATION SYSTEMS LTD) 12 April 1995 (1995-04-12) * page 4, line 19 - page 7, line 5 *	1-8	TECHNICAL FIELDS SEARCHED (Int.Cl.8) G07F G06K G07G G06F H04M
A	US 5 093 862 A (SCHWARTZ HERMANN) 3 March 1992 (1992-03-03) * column 1, line 6 - column 1, line 12 * * column 2, line 29 - column 4, line 27 *	1-4,6-8	
X,P	EP 0 778 691 A (HITACHI LTD) 11 June 1997 (1997-06-11) * column 6, line 37 - column 13, line 20 *	1	
X	EP 0 546 584 A (MATSUSHITA ELECTRIC IND CO LTD) 16 June 1993 (1993-06-16) * column 3, line 10 - column 7, line 33 *	11,12	
—/—			
*The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 9 February 2001	Examiner Asplais, B
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document</p> <p>T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application I: document cited for other reasons</p> <p>&: member of the same patent family, corresponding document</p>			

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Office

EUROPEAN SEARCH REPORT

Application Number
EP 97 30 5379

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cls)
Y	EP 0 518 808 A (ASCOM AUTELCA AG) 16 December 1992 (1992-12-16) * column 5, line 19 - column 7, line 13 *	11	
Y	GB 2 296 361 A (JPM INT LTD) 26 June 1996 (1996-06-26) * page 2, line 6 - page 3, line 7 *	11	
			TECHNICAL FIELDS SEARCHED (Int.Cls)
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 9 February 2001	Examiner Aupiais, B
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EP FORM 183 (01.01.97) (P4001)



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LACK OF UNITY OF INVENTION
SHEET B

Application Number
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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-8

Electronic purse comprising switching means so that electronic money can be received and sent between the IC card reading and writing means and the external device connecting terminal and an external device detecting means for detecting a response from the external device connected to the external device connecting terminal.

2. Claims: 9-10

Electronic purse comprising means for sending information regarding the construction of the electronic purse before sending electronic money information through the external device connecting terminal.

3. Claim : 11

Electronic purse comprising a lump-sum remittance button and a lump-sum remittance button operation detecting means.

4. Claims: 12-13

An electronic purse comprising a lump-sum drawing button.

5. Claim : 14

An electronic purse comprising a transaction button, numerical input means, an instruction decision button, a remittance direction detecting means.

6. Claims: 15-16

An electronic purse comprising a modem, a transaction button, telephone receiver means for outputting voice information received through a communication line.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

09-02-2001

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0670556	A	06-09-1995	FR 2716988 A	08-09-1995
			DE 69518678 D	12-10-2000
			JP 7271888 A	20-10-1995
			US 5635701 A	03-06-1997
WO 9221110	A	26-11-1992	SE 470149 B	15-11-1993
			AU 645909 B	27-01-1994
			AU 1786692 A	30-12-1992
			CA 2086670 A	11-11-1992
			DE 69228742 D	29-04-1999
			DE 69228742 T	07-10-1999
			EP 0560946 A	22-09-1993
			JP 6501331 T	10-02-1994
US 5434395	A	18-07-1995	SE 9101408 A	11-11-1992
			FR 2661762 A	08-11-1991
			AT 112081 T	15-10-1994
			AU 7890991 A	27-11-1991
			DE 69104198 D	27-10-1994
			DE 69104198 T	09-03-1995
			DK 527203 T	10-04-1995
			EP 0527203 A	17-02-1993
			ES 2065035 T	01-02-1995
			WO 9117528 A	14-11-1991
GB 2282683	A	12-04-1995	NONE	
US 5093862	A	03-03-1992	AT 120021 T	15-04-1995
			DE 58909106 D	20-04-1995
			EP 0355372 A	28-02-1990
			ES 2069553 T	16-05-1995
EP 0778691	A	11-06-1997	JP 9163013 A	20-06-1997
			CN 1159116 A	10-09-1997
EP 0546584	A	16-06-1993	JP 2899464 B	02-06-1999
			JP 6019945 A	28-01-1994
			JP 6020106 A	28-01-1994
			JP 8027815 B	21-03-1996
			KR 125095 B	15-12-1997
EP 0518808	A	16-12-1992	CH 683133 A	14-01-1994
			AT 141703 T	15-09-1996
			DE 59206935 D	26-09-1996
			DK 518808 T	09-09-1996

EPO Patent Office

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EP 0 820 043 A3

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ON EUROPEAN PATENT APPLICATION NO.**

EP 97 30 5379

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The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

09-02-2001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 2296361 A	26-06-1996	NONE	

EPO FORM P/98

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82